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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 09/594,324 | 06/15/2000 | Toshio Matsumura | | 8859 |

7590 12/04/2002

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| EXAMINER |
|---|
| CINTINS, IVARS C |

| ART UNIT | PAPER NUMBER |
|---|---|
| 1724 | 10 |

DATE MAILED: 12/04/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

AS-10

# Office Action Summary

| Application No. | Applicant(s) |
|---|---|
| 09/594,324 | Matsumura et al. |
| **Examiner** | **Art Unit** |
| Ivars Cintins | 1724 |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) ☒ Responsive to communication(s) filed on *Sep 13, 2002* .

2a) ☒ This action is **FINAL.** 2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

**Disposition of Claims**

4) ☒ Claim(s) *1 and 3-31* is/are pending in the application.

4a) Of the above, claim(s) *25-31* is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1 and 3-24* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claims _____ are subject to restriction and/or election requirement.

**Application Papers**

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☐ All b) ☐ Some* c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____
4) ☐ Interview Summary (PTO-413) Paper No(s). _____
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 5, 13, 21, 22 and 24 are again rejected under 35 U.S.C. 103(a) as being unpatentable over Chen et al. As pointed out in the previous Office Action, Chen et al. discloses a porous structure (filter) for separating unwanted constituents from a fluid, which structure comprises activated carbon in combination with a polymeric binder of the type recited. Accordingly, this reference discloses the claimed invention with the exception of the recited inlet and outlet for the filter, the exact melt index of the binder, and the exact density of this porous structure. However, since the porous structure of the reference is intended to be used as a filtration material, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide this reference material with a housing having an inlet and an outlet, in order to facilitate contact between this filtration material and the fluid undergoing treatment. Also, the exact melt index of the binder in this reference material,

and its exact density are not seen to materially affect the overall operation of the reference device, or to produce any new and unexpected result; and are therefore deemed to be obvious matters of choice in design, insufficient to patentably distinguish the claims.

Claim 12 is again rejected under 35 U.S.C. 103(a) as being unpatentable over Chen et al. in view of Shmidt et al. As pointed out in the previous Office Action, Chen et al. discloses the claimed invention with the exception of the recited mixture of diverse activated carbon particles. Shmidt et al. discloses an adsorbent material comprising activated carbon having different particle sizes; and further teaches that such a composite material has low flow resistance and improved adsorption properties. Since these characteristics would obviously be desirable in the device of Chen et al.; it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ the activated carbon mixture of Shmidt et al. in the filter of Chen et al., in order to obtain the advantages disclosed by this secondary reference for the device of the primary reference.

Claims 1, 3-11 and 13-24 are again rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Unexamined Patent Application Publication No. 10-85729 in view of Chen et

al. As pointed out in the previous Office Action, the primary reference discloses a filter cartridge comprising a chamber filled with activated carbon, and a hollow yarn membrane chamber. Accordingly, this primary reference discloses the claimed invention with the exception of the recited polymeric binder. Chen et al. discloses a porous filter element of the type recited; and it would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the filter element of the secondary reference for the activated carbon of the primary reference, in order to obtain the advantages disclosed by this secondary reference for the system of the primary reference. The exact melt index of the binder employed, the exact orientation of the two filtering elements, and the exact density of the composite carbon filter element are not seen to materially affect the overall operation of the thus modified primary reference device, or to produce any new and unexpected result; and are therefore deemed to be obvious matters of choice in design, insufficient to patentably distinguish the claims.

Claim 12 is again rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Unexamined Patent Application Publication No. 10-85729 in view of Chen et al. as applied above, and further in view of Shmidt et al. As pointed out in the

previous Office Action, the modified primary reference discloses the claimed invention with the exception of the recited mixture of diverse activated carbon particles. Shmidt et al. discloses an adsorbent material comprising activated carbon having different particle sizes; and it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ the activated carbon mixture of Shmidt et al. in the filter of the modified primary reference, in order to obtain the advantages disclosed by this secondary reference for the device of the modified primary reference.

Applicant's arguments filed September 13, 2002 have been noted and carefully considered but are not deemed to be persuasive of patentability. Applicant acknowledges that Chen et al. discloses a broad melt index range which includes the recited values; but argues that this patentee fails to recognize the significance of the narrower range now recited in claim 1. Applicant also presents test data in an attempt to show new and unexpected results for this narrower range. It is pointed out, however, that the test data presented on pages 4-6 of the response filed September 13, 2002 cannot be relied upon to demonstrate new and unexpected results because this data has not been presented in proper 37 CFR § 1.132 affidavit or declaration form (see MPEP § 716.01(c)). Upon receipt of a proper "Rule 132"

declaration, the test results will be considered, and the above rejections will be reevaluated.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to I. Cintins whose telephone number is (703) 308-3840. The examiner can normally be reached on Monday through Friday from 8:30 AM to 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. David Simmons, can be reached at (703) 308-1972.

The fax phone numbers for this art unit are: (703) 872-9311 for "Official" faxes after Final Rejection; (703) 872-9310 for all other "Official" faxes; and (703) 872-9492 for "Draft" and other "Unofficial" faxes.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0661.

Ivars Cintins

**Ivars C. Cintins**
**Primary Examiner**
**Art Unit 1724**

I. Cintins
December 1, 2002